Acid malachite test

Def: :Chemical test used for diagnosis of Bleeding

Principle : Change in Colour of indicator acc. to blood amount present in the Sample

Material : Meat extract — Hb extraction test احضر مثل تجربة

Reagent : ① Acid malachite green

0.1 gm malachite green Powder + 25 ml of glacial acetic acid 30% → heating in water path 60% / 10 m

→ Add 100 ml D.W and put in Dark glass bottle

② H_2O_2 3%

Procedure



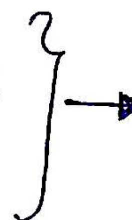
1 drop H_2O_2 3%
1 Drop Acid malachite green
0.7 ml meat extract

→ Shaking → allow to stand for 20 min

Result	Blue	Light green	Dark green
Judgment	well bled fit for human Consumption	Moderate bled fit for rapid Consumption	ill bled total Condemnation

explanation

excess Hb in ill-bled meat
+
nacent o Liberated from H_2O_2 3%
+
Acid malachite green

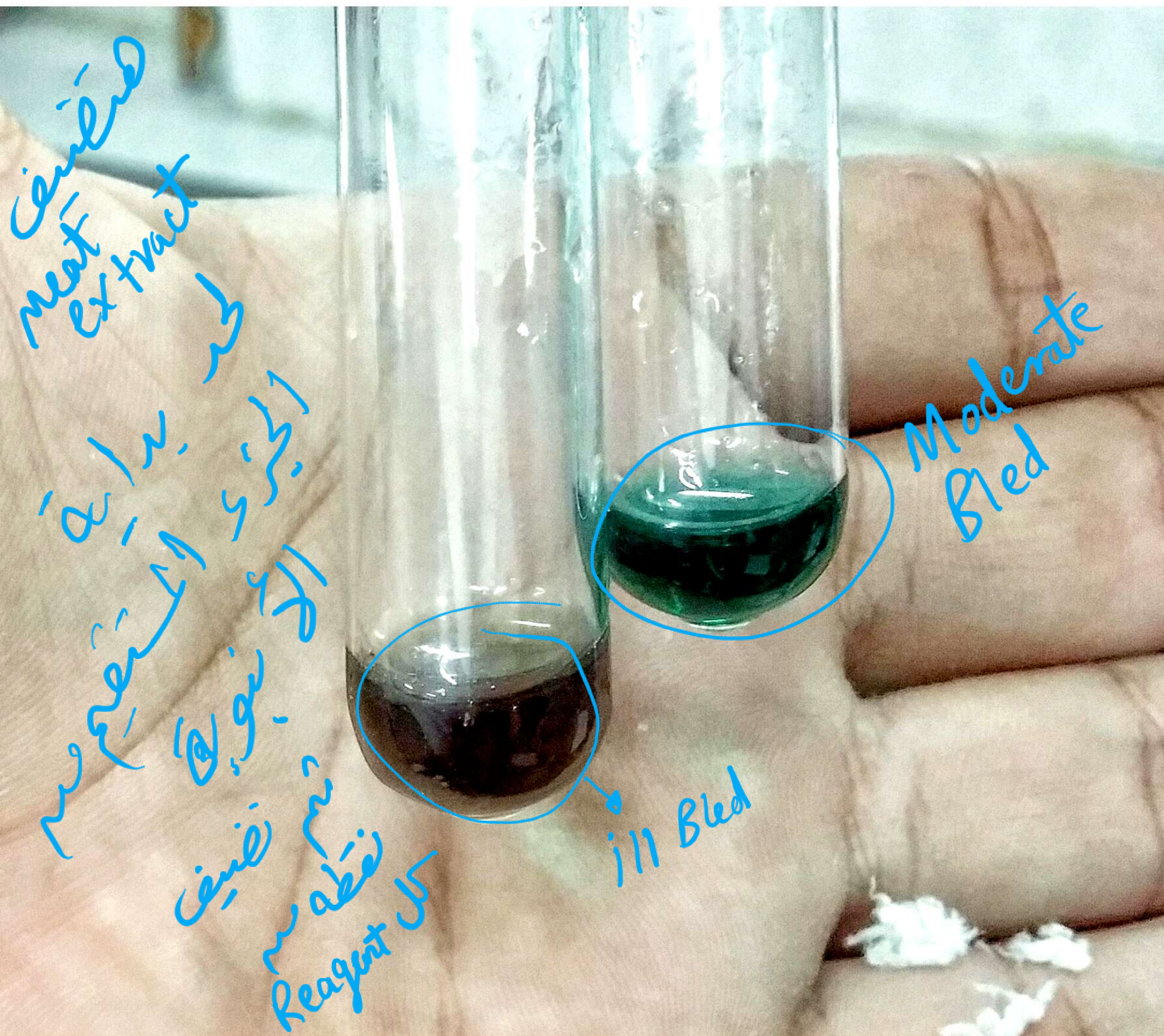


→ oxy haemoglobin malachite green Complex (green Colour)


H2O2
3%
Acid ma
gree



H_2O_2
3%
malachit
green


meat extract
Moderate Bled
ill Bled
Reagent

Reder's Test

Def : Chemical test used for diagnosis of Bleeding

Principle : Change in Colour of indicator acc. to blood amount present in the sample

Procedure



3gm minced meat

5 mL Reder's Reagent → { 0.1 ml Loeffler's Methelene blue; 40 ml D.W; 0.05 ml of diluted Carbol fuscin Sol }

Result & Judgment

Blue Colour	Light green	Dark green almost Brownish
well bled fit for ~~humans~~ human Consumption	Moderate bled fit for rapid Consumption	ill bled - total Condemnation


Reder's reagent

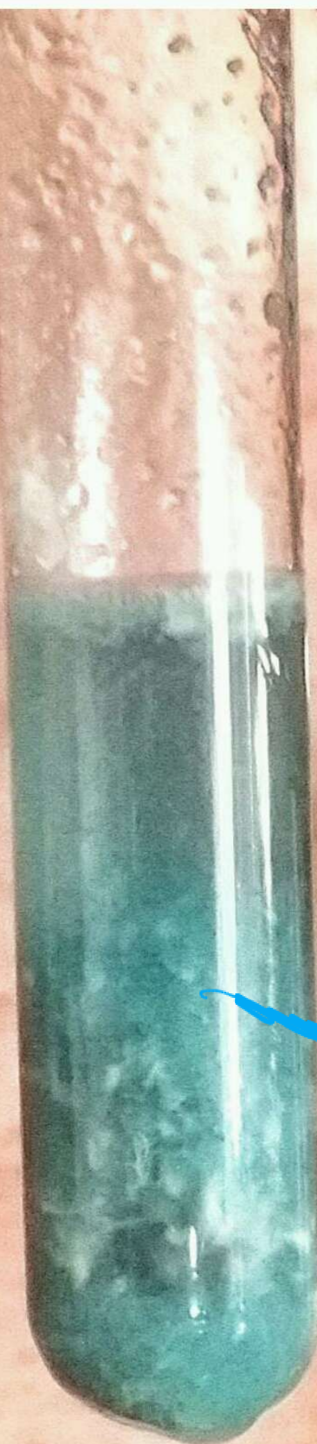



عينة الدم
قد عقلة الأصبع
بناخدها بالأنبوبة من الطبق
بنضيف للأنبوبة Reagent
عن طريق الزجاجة
وليس عن طريق Pipete





Ill Bled





Moderate Bled

Nitrazine yellow indicator test

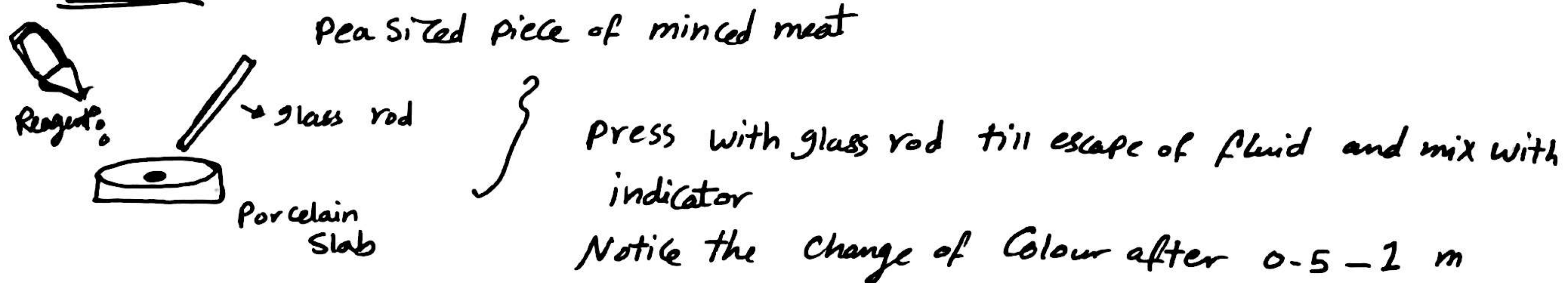
Def : Test used for measurement of meat pH
[redacted] .

Principle : Change Colour of indicator according to pH degree

equipment

- minced meat (peasize)
- glass rode
- small dish
- Reagent (Nitrazine yellow 0.01 %) aqueous Solution
  {1 gm / 10 L water}

Procedure



pea sized piece of minced meat

press with glass rod till escape of fluid and mix with indicator

Notice the change of Colour after 0.5 – 1 m

Result, Judgment

Yellow Colour	PH ≤ 6	Pass for human Consumption
Blue Colour	pH ≥ 6.8	unfit for " "






Nitrazine


zine yellow





Rapid phase test

~~Def~~
Def

Laboratory test used for detection of abnormal Colour of Carcasses

Material

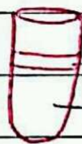
Chopped fat
NaOH 5%
Diethyl ether

Procedure

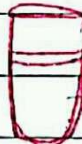


→ Shake up → heat on flame for about 2 min till Complete dissolving of fat → Cooling under running tap water → add 5 ml diethyl ether → Shake well → leave the Contents in the tube till Separation into 2 layers → Observe Colour of both layers

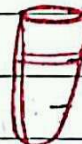
Result



Normal Buffalo



ictric Cattle



Normal Cattle

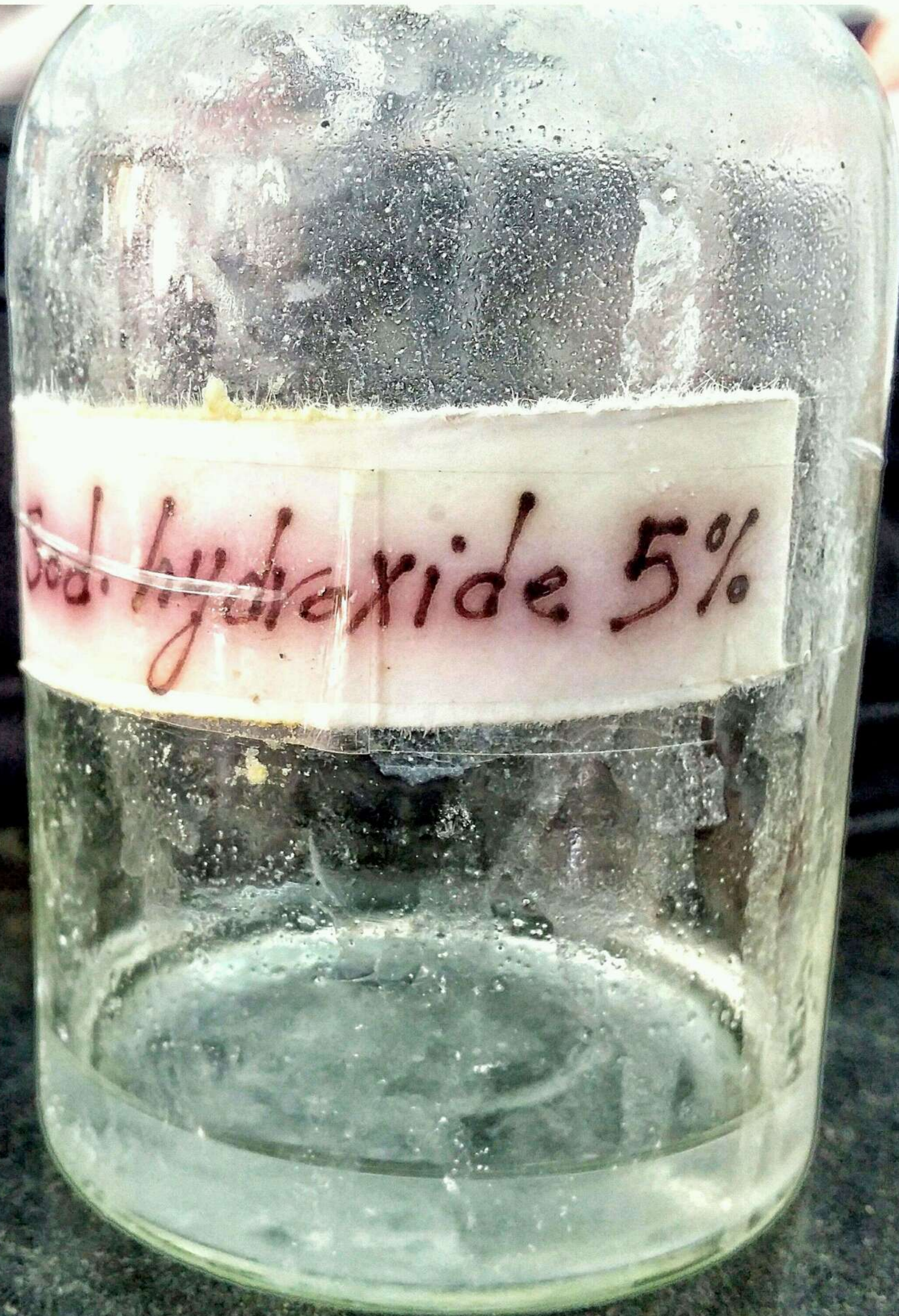


ictric Buffalo

Judgment

- Physiological Yellow Coloured carcass
  → pass for human Consumption
- Marked discolouration of Carcass
  → unfit for human Consumption
- Slight discolouration
  → Chilling for 24 hrs → boiling test if absence of fecal odour → pass for human Consumption




Sod. hydroxide 5%

DIETHYL ETHER

بيكون موجود مع الدكتورة

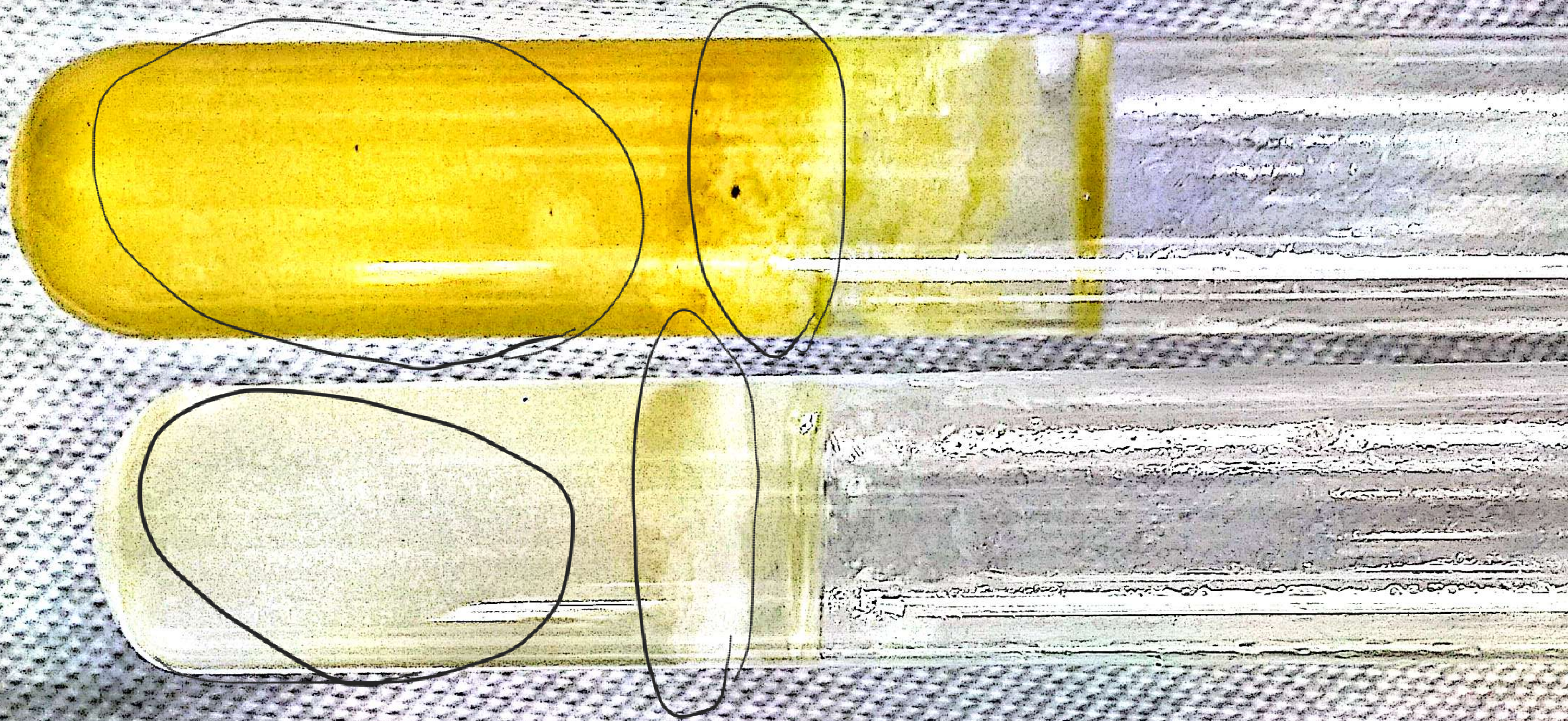


هنسخن لحد ما
تذوب الدهون
وبعدين نبرد الكـ
مية الخفية

العينات الموجودة فى القسم

Normal Buffalo

ictric Cattle



Eber's test

Def: Chemical test used for qualitative detection of Ammonia in decomposed meat sample

Reagent Mixture of

1 part	: 1 part of	: 3 parts of
HCl with SP.Gr 1.125	Diethyl ether	ethanol 96%

Procedure



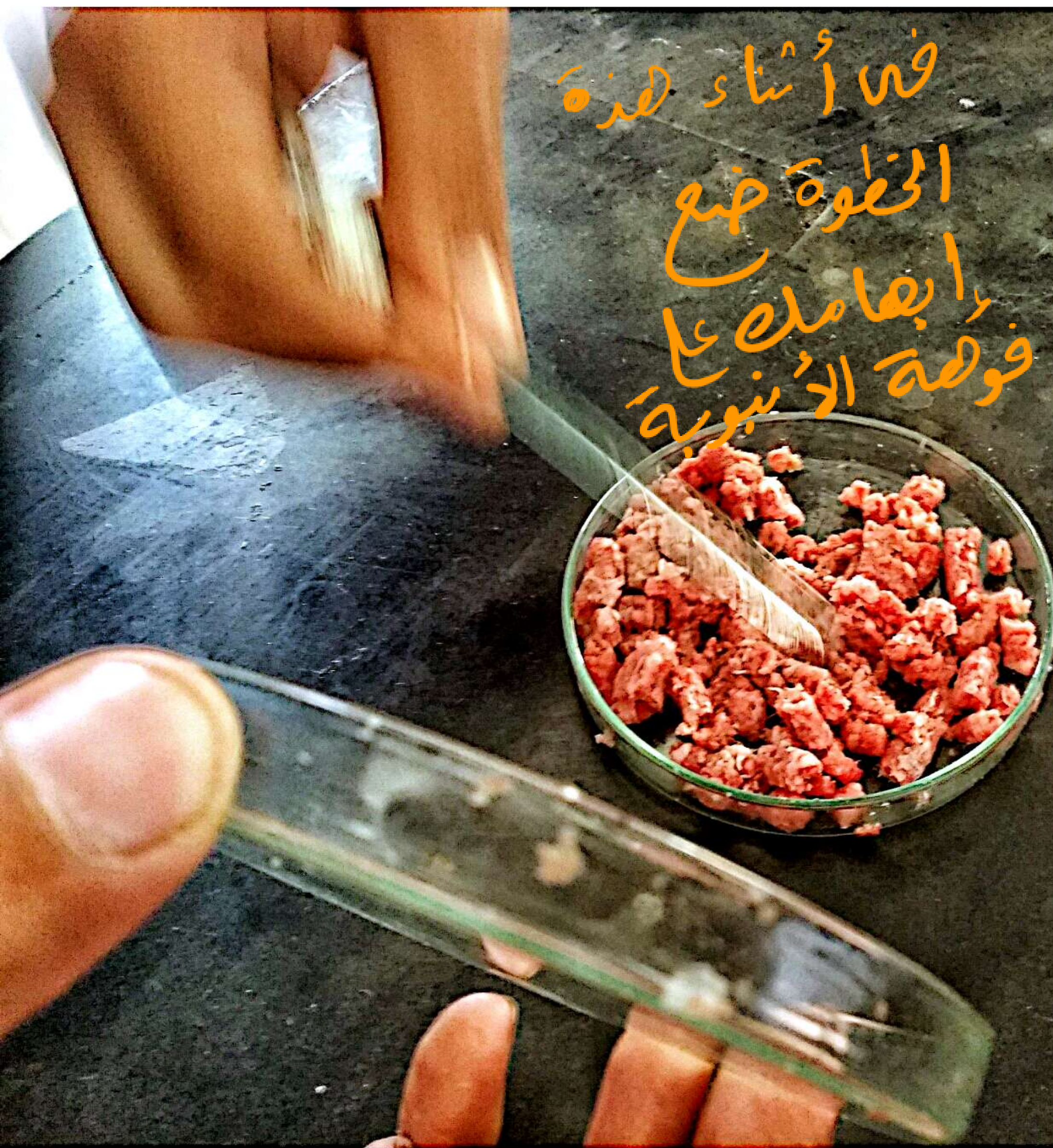
→ Quickly push glass rod in meat and rotate it so that a small piece of the sample can be removed with the rod then replace the corked rod to the tube provided the meat doesn't contact the reagent

Result Grey or white cloudness within seconds if the sample contain 26 mg% or more of ammonia this cloudness is better seen if a black ground is put behind the test tube

Precautions
1- the test tube corked well and placed in ammonia free atmosphere
2- Temp of meat shouldn't be colder than the Reagent's
3- in cured meat (pickled) take care during test as ammonia will be formed due to reduction of the salt peter $NaNO_3$ or KNO_3 although there is no putrefaction
4- Don't touch wall of the tube or introduce the sample in it
5- the free end of the glass rod should be above the level of the reagent surface by 1 cm

the formed Cloudiness Consists of ammonium, Chloride which result from the reaction between HCL of the Reagent and ammonia of the decomposed meat


العينة
ممكن أشم الريحة قبل ما أشتغل علامة ريحة الأمونيا


في أثناء هذه
الخطوة ضع
إبهامك على
فوهة الأنبوبة
Push the glass
rod in meat
and rotate it
To take
small
piece



عدم تكون سحب بيضاء

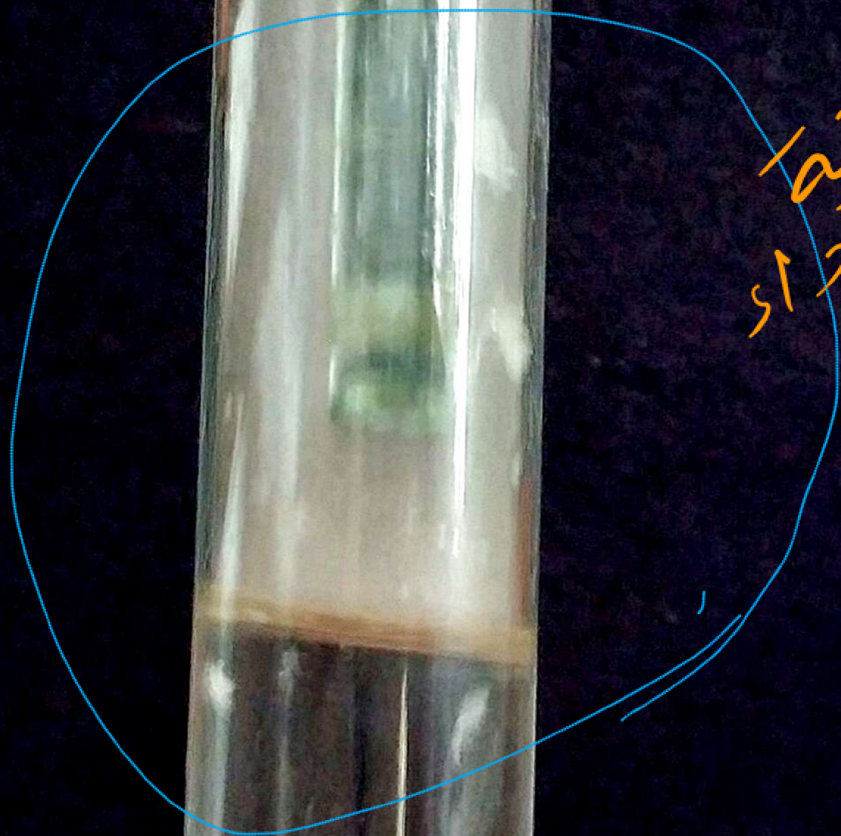
-ve



glass rod
Not Contact
with the tube
and above
the level of
the Reagent

السحب
المتكونه

+Ve



أقدر
أشوف
النتيجه
أفضل
ع
خلفية
سوداء